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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,928	03/28/2001	George H. Scherr		4270
7590 George H. Scherr, Ph.D. 33 Monee Road Park Forest, IL 60466		02/05/2008	EXAMINER ROBERTS, LEZAH	
			ART UNIT 1612	PAPER NUMBER
			MAIL DATE 02/05/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/818,928	SCHERR, GEORGE H.
	<b>Examiner</b>	<b>Art Unit</b>
	Lezah W. Roberts	1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 November 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 78-107 is/are pending in the application.
  - 4a) Of the above claim(s) 93-107 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 78-92 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

This Office Action is in response to the Request for Continued Examination filed May 25, 2007. All previous rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election by Original Presentation***

Newly submitted claims 108-136 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: If the claims were originally presented, a restriction between the new claims and the previous presented claim would be as follows: Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 78-92, drawn to a process for making a cellulosic foam, classified in class 536, subclass 2.
- II. Claims 93-136, drawn to pectate wound dressing, classified in class 424, subclass 488.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process

(MPEP § 806.05(f)). In the instant case the product may be made without a base or acid. The products may be made by dissolving pectin in solution, cross-linking the pectin and pouring it on a substrate.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 108-136 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claims***

#### **Claim Rejections - 35 USC § 103 – Obviousness (Previous Rejection)**

1) Claims 78-90 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. (US 5,089,606) in view of Nelson (US 4,065,614), Park et al. (US 2001/0038831), Pellico (US 4,291,025) and Shah et al. (US 5,527,271). The rejection is maintained.

#### **Applicant's Arguments.**

Applicant asserts the compositions of the reference are mixed by a syringe. The reference teaches a water-insoluble di or trivalent metal and the compositions of the instant claims cannot use water-insoluble metal. The delivery of the referenced composition by a double barrel syringe has to be used as is and then a secondary dressing has to be applied over it to hold the suitable components. Applicant further

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asserts the insoluble metal salts of the reference must be made soluble by reacting with water-soluble acids. The acids used include alginic acid, which is water insoluble.

Applicant further argues that the deficiencies of Cole et al. are needed for the procedure of the instant claims. No one has used the prior art to come up with compositions of the instant claims.

Applicant goes on to discuss the differences between pectic acid and pectin. The compounds vary and will react differently to cations such as calcium. Furthermore the reference merely mentions the procedures of the reference may use pectic acid. Not all pectins will act in the manner as disclosed by Sherr. Applicant further submits art to show the differences in different pectins. Applicant further submits other references dealing with the properties of pectins.

Examiner's Response

Applicant does not recite in the instant claims how the compositions are mixed. The metals used in the compositions of the reference include calcium sulfate which is disclosed by Applicant as a suitable salt in claim 89. Furthermore the claims recite a "cation metal ion salt" not a "water-soluble cation metal salt". It would take no more than relative skill in the art to adjust the order of the procedure to fit the desired function of the foam. It would have been obvious to pour the compositions to make the mixture and then pour the mixture on a substrate to make a bandage. This would allow for a greater absorption capability of the wound dressing and the longer the wound dressing may be retained on the wound, as disclosed by Shah. Selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results, see

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also In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946). Furthermore, selection of any order of mixing ingredients is prima facie obvious, see In re Gibson, 39 F.2d 975,

5 USPQ 230 (CCPA 1930). Also see Ex parte Rubin, 128 USPQ 440 (Bd. App. 1959).

The acids used in the compositions include acetic acid which is a water-soluble acid.

Furthermore in regards to acids such as alginic acid and pectic acid, the reference also includes the water soluble salts of alginic and pectic acids. The deficiencies of Cole are filed by the secondary reference. It is reasonable for one of ordinary skill in the art to look to the prior art to improve the wound dressings of the primary reference. Although no one has disclosed the exact procedure as recited by Applicant's claims, it does not necessarily mean the procedure of making the pectin sponges of the instant claims is non obvious.

In regards to the mere mention of pectic acid, it is also mentioned in the claims of the reference. As disclosed by Nelson, pectins do act differently to calcium salts. One would also look to Nelson to determine which type of pectin is suitable and can be made insoluble with calcium salts. Applicant recites the pectin has a degree of esterification of less than 50%. This includes pectic acid and its salts which has a 0% degree of esterification which is less than 50%. The definition of pectic acid is "demethylate pectin".<sup>1</sup> Furthermore, the reference mentions pectin as being suitable for making wound dressings and may be used interchangeably with alginic acid.

"The composition consists of at least two components capable of forming a gel on mixing, such as a calcium salt and alginic acid, polyglucuronic acid, polymanuronic acid, propylene glycol alginic acid, polygalacturonic acid, polyarabinic acid, their salts or esters, pectin, gum arabic and their mixtures, to be simultaneously or sequentially placed onto the mucous membrane.

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<sup>1</sup> "pectic acid." A Dictionary of Food and Nutrition. Oxford University Press, 1995, 2003, 2005. Answers.com 04 Feb. 2008. <http://www.answers.com/topic/pectic-acid>.

This indicates that pectin would also be a suitable polysaccharide to use in the compositions of the instant reference. Furthermore as disclosed by Nelson, pectins with low amounts of methyls react with calcium to form gels (col. 1, lines 38-58). The properties Applicant argues are those disclosed by the secondary reference cited by Examiner and therefore it is reasonable that one of skill in the art would used the appropriate pectin for the desired function. As stated above, the only characteristics of pectin recited in the instant claims are the degree esterification and the degree of amidation. In regards to the table of characteristics of alginate and pectin, this is unnecessary to show that alginate and pectin will form a gel when mixed with a calcium salt. As disclosed by the reference of Nelson, pectin with a certain esterification degree will form a gel with calcium. As disclosed by US 5,147,648, which is also disclosed by Cole, water-soluble alginates and pectin are polysaccharides that will form gels with calcium salts. Applicant appears to be arguing that the Examiner has used improper hindsight reasoning in construing her rejection. The Examiner does not agree, however, since the knowledge used (the gelling functions of pectin and the properties of the added components) comes from the prior art, not from applicant's specification. Reconstruction of this type is in fact permitted; see *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Someone of ordinary skill in the art would be motivated to look to the art to determine ways to improve products.

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2) Claims 91 and 92 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. (US 5,089,606) in view of Nelson (US 4,065,614), Park et al. (US 2001/0038831), Pellico (US 4,291,025 and Shah et al. (US 5,527,271) as applied to claims 78-90 above, and further in view of Bannert (US 5,147,648). The rejection is maintained.

*Applicant's Arguments*

Applicant argues the omissions of Bannert are significant omissions and fail to meet the criteria of 35 USC 103 in that the subject matter of Bannert as a whole differs radically from the instant claims.

*Examiner's Response*

Bannert is used to disclose why it is desirable to use mixtures of polysaccharides as opposed to one. This provides motivation to add additional polysaccharides to the compositions of Cole or use the already disclosed polysaccharides in mixtures. The rejection is of obviousness and therefore one reference does not have to disclose all the limitation of the instant claims. It provides motivation as to why one would combine the references. The response by Applicant is incomplete and therefore the Examiner cannot appropriately respond to Applicant.

**Obvious-Type Double Patenting (Previous Rejection)**

1) Claims 78-92 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,696,077 in view of Cole et al. (US 5,089,606). The rejection is maintained.

Applicant is arguing the difference between Cole et al. and Patent 6,696,077.

The secondary reference is cited to show alginate and pectin are at times used interchangeably and are both polysaccharides. Furthermore the instant claims recite a mixture of polysaccharides which include alginates and pectins in the instant claims and the patented claims. The two sets of claims use the same method with different polysaccharides and also indicate that the two polysaccharides may be used together. Therefore they are coextensive and are obvious over one another.

2) Claims 78-92 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 7,128,929 in view of Cole et al. (US 5,089,606). The rejection is maintained.

See arguments and response in subsection 1.

Claims 78-92 are rejected.

Claims 93-107 are withdrawn.

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### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Patent Examiner  
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